

January 29, 1985

Dr. Phillip R. Brown  
Anem Pet Emergency Clinic  
2115 S. Campbell  
Springfield, MO 65807

Dear Dr. Brown:

Due to a service station losing gasoline to the sanitary sewer, you were experiencing a gasoline odor in your premises at 2115 S. Campbell. The service station has since found and corrected the source of the leak.

The fact that gases are entering your building from the sewer indicates that potentially serious health and safety hazards exist on your premises. Some of the most common dangerous gases that exist in the sewer and their hazards (from the Manual of Instruction for Sewage Treatment Plant Operators) are:

Carbon Monoxide - Colorless, odorless, non-irritating. Flammable, explosive. Hemoglobin of the blood has strong affinity for the gas, causing oxygen starvation in the tissues.

Hydrogen - Colorless, odorless, tasteless, non-poisonous, flammable. Explosive. Propagates flame rapidly. Acts mechanically to deprive tissues of oxygen. A simple asphyxiant.

Methane - Colorless, odorless, non-poisonous. Flammable, explosive.

Hydrogen Sulfide - Rotten egg odor in small concentrations, but sense of smell rapidly impaired. Odor not evident at high concentrations. Colorless flammable, poisonous. Explosive.

Carbon Dioxide - Colorless, odorless, non-flammable. Not generally present in dangerous amounts unless there is already a deficiency of oxygen.

There are, of course, many other substances that can be present in the sanitary sewer.

However, plumbing in good repair is designed to prevent sewer gas from venting back into the building. The gasoline odors apparently entered your building

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because of dry traps in some floor drains and a leaky seal on the toilet in one of the restrooms. This indicates some plumbing problems in the building and steps should be taken to correct these problems.

If we can be of further assistance, or if you have any questions, please don't hesitate to call.

Yours truly,

Henry M. Cole, P.E.

Sanitary Engineer

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Robert Schaefer, P.E., Superintendent of Sanitary Services